

REMARKS

In the Office Action, dated February 9, 2004, the examiner:

- (i) Required election of a single disclosed species from those identified by the examiner as Group X --- Figure 1-6 (including claims 2-3, 14-22), Group Y --- Figures 7-13 (including claims 4-9, 29-41), and Group Z --- Figures 14-16 (including claims 10-12, 23-28);
- (ii) Withdrew claims 2-9, 14-22, 29-41 from further consideration, based on verbal election of species Z without traverse by applicant's attorney, James Young, in a telephone call dated January 23, 2004;
- (iii) Rejected claims 1, 13, 42 under 35 U.S.C. § 102(b) as being anticipated by Waters, Benkovic, Healey et al., or Haber et al. and under 35 U.S.C. § 102(e) as being anticipated by Hickerson or McLaren;
- (iv) Rejected claim 13 under 35 U.S.C. § 102(b) as being anticipated by Haber et al.;
- (v) Rejected claims 11 to 12 under 35 U.S.C. § 103(a) as being unpatentable over Haber et al. in view of Wolford;
- (vi) Rejected claims 23, 27 under 35 U.S.C. § 102(b) as being anticipated by Parker; and
- (vii) Objected to claims 24-26, 28 as being dependent upon a rejected base claim, but indicated these claims 24-26, 28 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The applicant affirms the previous verbal election of species Z without traverse. Also, in response to the examiner's rejections of claims 1, 10-13, 23-27, and 42 and to his indication of allowable subject matter in claims 24-26 and 28, the applicant has amended this application to amend some claims, cancel others, and add new claims to more clearly and fully claim the invention, as will be explained in more detail below. All of the new claims 43-62 read on the elected Group Z species (Figures 14-16). Applicant has also made several amendments to the specification and drawings to correct word processing errors and to eliminate inconsistencies between the drawings and the specification.

Claims 1, 10, 11, 13, 24, 25, 28, and 42 are cancelled without prejudice, as some of the subject matter therein is restated in amended and new claims.

Re Claim 12:

Dependent claim 12 is amended to depend from new claim 50. This claim 12 is directed to the feature shown in Figure 15 and described in paragraph [0065], wherein a tool 122 can be prevented from accessing a mating socket 132 on the end of a shaft 140 inside a tube 134 by a lock bar 24 extending through a traverse hole 123 to occlude the opening 137. Contrary to the examiner's assertion, neither Haber et al. nor Wolford discloses or suggests this feature. Therefore, claim 12 should be allowable.

Re Amended Claim 23 and Cancelled Claim 24:

Claim 23 is amended to include the allowable subject matter of dependent claim 24, as suggested by the examiner, so claim 23 should now be allowable. Claim 23 is also amended to change the words "an ammunition chamber" to -- a firing chamber -- to be consistent with the specification. Dependent claim 24 has been cancelled to avoid redundancy.

Re Amended Claim 27:

Dependent claim 27 is amended to eliminate the word "twisting", which in this context is redundant with "turning". The specification treats "twisting", "turning", and "rotating" as synonymous when describing the motion of the barrel rod 140, so no substantive change is made by this amendment.

Re New Claim 43, Cancelled Claim 25, and Amended Claim 26:

New independent claim 43 combines the subject matter of original claim 23 with the allowable subject matter of dependent claim 25, as suggested by the examiner, so new claim 43 should be allowable. Dependent claim 25 has been cancelled to avoid redundancy, and dependent claim 26 is amended to depend from new claim 43.

Re New Claim 44 and Cancelled Claim 28:

New independent claim 44 combines the subject matter of original claim 23 with the allowable subject matter of dependent claim 28, as suggested by the examiner, so new claim 44 should be allowable. Dependent claim 28 has been cancelled to avoid redundancy.

Re New Claim 45:

New claim 45 is similar in subject matter to amended claim 23, i.e., but not quite so limited in several respects. However, new claim 45 is believed to be allowable, because none of the prior art references cited disclose or suggest a firearm locking device with the attachment structure recited in new claim 45, which requires both longitudinal and rotational movement of the barrel rod in relation to the firing chamber plug to detach the barrel rod from the firing chamber plug. Parker, for example, has a rod 7 with a cross-pin 14 that slides into a pair of longitudinal slots 13 in a thimble 12 and does not require any rotational movement to detach the rod 7 from the thimble 12. In fact, Parker's rod 7 is not even attachable or detachable from the front of his thimble 12, as is described for the barrel rod 140 of the present invention, and Parker's rod 7 does not even have to be detached from his thimble 12 in order to remove his thimble 12 from his firing chamber 8. On the contrary, as explained in Parker, column 2, lines 41-46, once Parker's lock body 1 at the front of his barrel 3 is removed from his rod 7, both the rod 7 and the thimble 12 are withdrawn rearwardly from the gun. Further, Parker's rod 7 with its cross-pin 14 can be separated from his thimble 12 simply by sliding the rod 7 rearwardly through and out of his thimble 12, and no rotational motion of the rod 7 is required.

Therefore, the Parker attachment structure is not only different than the attachment structure of the present invention recited in new claim 45, but it is also incapable of attaching and detaching in the same way. Further, no other prior art reference teaches or suggests any way to modify Parker's structure to make the applicant's invention as recited in new claim 45. Therefore, the applicant believes new claim 45 is allowable.

Re Claims 46 and 47:

Dependent claims 46 and 47 recite additional structure over Parker and other relevant prior art references, including the applicant's spring bias that bears between the rod and the plug to help keep the pin seated in spring biased resistance to detachment of applicant's rod 140 from the plug 126. Therefore, dependent claims 46 and 47 are also believed to be allowable.

Re Claim 48:

New claim 48 is directed toward the unique combination of features in the present invention in which the outer tube 134 both covers the inner shaft 140 and rotates freely over the inner shaft 140 so that manual manipulation of the outer tube 134, which sticks out from the muzzle end of the firearm barrel, cannot turn the inner shaft 140 in the manner needed to detach the inner shaft 140 from the plug 126, but wherein the distal end of the inner shaft 140 can be reached with a tool through the outer tube 134 to turn it in the manner required to detach the inner shaft 140 from the plug 126. This feature is not shown or fairly suggested by any of the prior art cited, thus is believed to be allowable. In this regard, the fastener shank head 23 of Welford is not covered by, and it does not have to be accessed through, an outer tube, as recited in applicant's new claim 48. Further, the screw 64 in Haber et al. merely fastens their knob 62 to their lock shaft 32 and has nothing to do with turning their rod 22. Therefore, there is no teaching or suggestion of the present invention recited in applicant's claim 48 in either of those cited references, Welford or Haber et al.

Re Claims 49 and 50:

Dependent claim 49 recites additional features of the present invention, including the independent longitudinal movement of the outer tube 134 in relation to the inner shaft 140 so that manual manipulation of the outer tube 134 cannot be used to move the inner shaft 140 longitudinally in the manner required to detach the inner shaft 140 from the plug 126. Dependent claim 50 recites an enlargement, e.g., 136, which limits longitudinal movement of the outer tube 134. These features are not shown or suggested by the prior art references cited and are also believed to be allowable.

Re Claims 51-58:

New claims 51-58, which are presented in means-plus-function format under 35 U.S.C. § 112, sixth paragraph, are directed to the structures and features discussed above, and the same comments in relation to allowability over cited prior art references discussed above are applicable to these claims. Therefore, claims 51-58 are also believed to be allowable.

Re Claims 59-62:

New claims 59-62 recite the method of locking and unlocking a firearm, as illustrated, for example, by the apparatus shown in Figures 14-16 and described in the specification. Therefore, the comments above distinguishing claims directed to apparatus illustrated in Figures 14-16 from the prior art references cited are also applicable to these method claims 59-62. None of the prior art references cited discloses or suggests these methods, so claims 59-62 are all believed to be allowable.

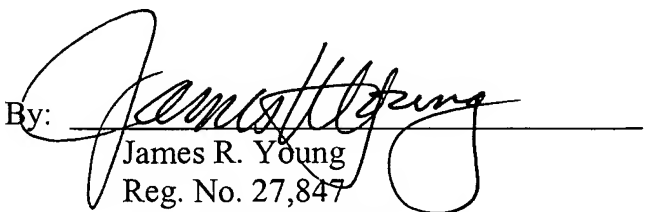
Summary:

All of the pending claims, as amended, are now believed to be allowable under 35 U.S.C. § 102 and 35 U.S.C. § 103 for the reasons explained above. Therefore, the examiner is requested to withdraw the previous rejections and objections and to grant an early allowance. If any issues remain to be resolved, the examiner is requested to contact applicant's attorney at the telephone number listed below.

Respectfully Submitted,
COCHRAN FREUND & YOUNG LLC

Dated: June 9, 2004

By: _____


James R. Young
Reg. No. 27,847
Tel.: 970-377-6363